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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,117

04/12/2004

Jai Subramanian

H0001862(4015)-div1

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21567

7590

04/22/2005

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EXAMINER

HARRIS, ANTON B

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **10/823,117**

Applicant(s)

SUBRAMANIAN, JAI

Examiner

Anton B. Harris

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/17/04; 3/30/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (6,271,058) in view of Ohgiyama (6,309,909), Toy et al. (5,956,576), and Lischner et al. (6,118,177 cited by Applicant).

Regarding claim 51, Yoshida (col. 5, lines 3-67) discloses a method of forming a plurality of microelectronic lids comprising:

forming a lid 1 stock material into a shape of a bar (figure 1) having a length, having a first side, having a groove (figure 16) extending along the first side, and having a second side opposing the first side, the first and second sides having substantially equivalent widths and; and

wherein the lid 1 stock material comprises aluminum or copper (col. 7 line 20), but lacks cutting the bar along the length to form a plurality of separated microelectronic lids, and electroplating the microelectronic lids with nickel, and having the second side being substantially planar across the width.

Ohgiyama (figure 9b) teaches cutting the bar along the length to form a plurality of separated microelectronic lids 30a.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Yoshida by cutting the bar along the length to form a plurality of separated microelectronic lids in order to provide covers for individual devices in view of the teachings of Ohgiyama.

Toy et al. (figure 9b) teaches electroplating the microelectronic lids 10 with nickel 64.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Yoshida by electroplating the microelectronic lids with nickel in order to improve electrical conductivity in view of the teachings of Toy et al.

Lischner et al. (figure 4) teaches having the second side 242 being substantially planar across the width.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Yoshida by having the second side being substantially planar across the width in order to improve heat efficiency in view of the teachings of Lischner et al.

Regarding claim 52, Yoshida (col. 5, lines 3-67) discloses a method of forming the lid 1 stock material into the shape by extruding the lid 1 stock material into the shape.

Regarding claim 53, Yoshida (col. 5, lines 3-67) discloses a method of forming the lid 1 stock material into the shape by providing a bar of the lid 1 stock material that lacks the groove (figure 16) in the side; and machining the groove (figure 16) into the side of the bar.

Regarding claim 54, Yoshida (col. 5, lines 3-67) discloses a method of providing a lid 1 stock material that comprises aluminum (col. 7 line 20).

Art Unit: 2831

Regarding claim 55, Yoshida (col. 5, lines 3-67) discloses a method of providing a lid 1 stock material that comprises copper (col. 7 line 20).

Regarding claim 56, Yoshida (col. 5, lines 3-67) discloses a method of incorporating at least one of the microelectronic lids 1 into a microelectronic package (figure 3), the incorporating comprising providing a chip 4 supported by a base 5; and adhering the microelectronic lid 1 to the base 5 and over the chip 4; the chip 4 accordingly being packaged between the microelectronic lid 1 and the base 5.


Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton B Harris whose telephone number is (571) 272-1976. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dean Reichard, can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

abh

4/18/05

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DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
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